**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Physical and Chemical Changes**

1. Label each process as a physical (P) or chemical (C) change:

a. perfume evaporating on your skin \_\_\_\_\_\_\_\_\_  
b. butter melting \_\_\_\_\_\_\_\_\_  
c. wood rotting \_\_\_\_\_\_\_\_\_  
d. charcoal heating a grill \_\_\_\_\_\_\_\_\_  
e. autumn leaves changing color \_\_\_\_\_\_\_\_\_  
f. a hot glass cracking when placed in cold water \_\_\_\_\_\_\_\_\_  
g. melting copper metal \_\_\_\_\_\_\_\_\_  
h. burning sugar \_\_\_\_\_\_\_\_\_  
i. mixing sugar in water \_\_\_\_\_\_\_\_\_  
j. digesting food \_\_\_\_\_\_\_\_\_

2. Which of the following would **NOT** be a physical change? Circle one, then explain your

Answer.

a. freezing water to make ice cubes   
b. melting gold to make jewelry   
c. burning gasoline in a lawnmower   
d. boiling water for soup   
e. tearing a piece of aluminum foil

explanation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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3. Which of the following is **NOT** a physical change? Circle one, then explain your answer.

a. grating cheese   
b. melting cheese   
c. fermenting of cheese   
d. mixing two cheeses in a bowl

explanation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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4. Which words represent a physical change and which represent a chemical change? Write a P

or C after each term.

a. boil \_\_\_\_\_\_\_\_\_  
b. burn (combustion) \_\_\_\_\_\_\_\_\_  
c. condense \_\_\_\_\_\_\_\_\_  
d. corrode \_\_\_\_\_\_\_\_\_  
e. crumple \_\_\_\_\_\_\_\_\_  
f. ferment \_\_\_\_\_\_\_\_\_  
g. melt \_\_\_\_\_\_\_\_\_  
h. rust \_\_\_\_\_\_\_\_\_  
i. crush \_\_\_\_\_\_\_\_\_  
j. freeze \_\_\_\_\_\_\_\_\_  
k. oxidize \_\_\_\_\_\_\_\_\_  
l. tarnish \_\_\_\_\_\_\_\_\_  
m. explode \_\_\_\_\_\_\_\_\_  
n. grind \_\_\_\_\_\_\_\_\_  
o. rot \_\_\_\_\_\_\_\_\_  
p. vaporize \_\_\_\_\_\_\_\_\_  
q. photosynthesis \_\_\_\_\_\_\_\_\_  
r. sublimation \_\_\_\_\_\_\_\_\_

6. Label each process as a physical (P) or chemical (C) change:

a. Moth balls gradually vaporize in a closet \_\_\_\_\_\_\_\_\_  
b. hydrofluoric acid attacks glass (used to etch glassware) \_\_\_\_\_\_\_\_\_  
c. Chlorine gas liquefies at -35 °C under normal pressure \_\_\_\_\_\_\_\_\_  
d. hydrogen burns in chlorine gas \_\_\_\_\_\_\_\_\_

7. Label each process as a physical (P) or chemical (C) change:

a. fogging a mirror with your breath \_\_\_\_\_\_\_\_\_  
b. breaking a bone \_\_\_\_\_\_\_\_\_  
c. mending a broken bone \_\_\_\_\_\_\_\_\_  
d. burning paper \_\_\_\_\_\_\_\_\_  
e. slicing potatoes for fries \_\_\_\_\_\_\_\_\_  
f. mixing sugar with coffee \_\_\_\_\_\_\_\_\_  
g. frying chicken \_\_\_\_\_\_\_\_\_  
h. a nail rusting \_\_\_\_\_\_\_\_\_  
i. paper ripping \_\_\_\_\_\_\_\_\_  
j. wood burning \_\_\_\_\_\_\_\_\_  
k. mixing water and food coloring \_\_\_\_\_\_\_\_\_  
l. food molding (rotting) \_\_\_\_\_\_\_\_\_  
m. writing on paper \_\_\_\_\_\_\_\_\_  
n. dyeing fabric\_\_\_\_\_\_\_\_\_